# DRAFT AGENDA: MISR Science Team Meeting February 2016 Beckman Institute Auditorium, California Institute of Technology, Pasadena, CA

## Thursday, February 18

## Welcome

8:15 AM	Sign-in	All	30
8:45 AM	Welcome	David Diner	15

## Clouds, Ice, and Radiation

#### **Moderator: TBD**

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14·111 AM	Quantifying the bias in MODIS-retrieved cloud drop effective radius through MISR and MODIS fusion	Larry Di Girolamo	20
9:20 AM	Multi-year trends in MISR observed cloud fraction and optical depth over the extratropical oceans	Roger Marchand	20
9:40 AM	Assessing MISR cloud fractions using ground-based fisheye lens TIR imagery at Chilbolton over 6 years	Jan-Peter Muller	20
10:00 AM	Inter-calibration of CERES, MISR and MODIS and its scientific impact	Yizhe Zhan	20
10:20 AM	Discussion	All	10
10:30 AM	Break	All	20
10:50 AM	Aerosol-cloud-climate interactions from cloud-resolving and general circulation models	Yuan Wang	20
11:10 AM	Reducing errors in simulated MISR cloud retrievals from GCMs	Benjamin Hillman	20
11:30 AM	Mapping sea ice roughness from MISR	Anne Nolin	20
11:50 AM	Discussion	All	10
12:00 PM	Lunch	All	90

Winds Moderator: TBD

1:30 PM	Comparisons of MISR CMV and new Himawari-8 AMV measurements	Dong Wu	20
1:50 PM	Title TBD	Kevin Mueller	20
2:10 PM	GEOS-5 operational data assimilation system	Junjie Liu	20
	An assessment of the impact of the assimilation of NASA TERRA MISR Atmospheric Motion Vectors on the Navy Global Environmental Model (NAVGEM)	Nancy Baker	20
2:50 PM	MISR winds along the equator during five El Niño and four La Niña events	David Halpern	20
3:10 PM	Discussion	All	10

### Poster session I

3:20 PM Poster viewing	and break	All	70
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# **Atmospheric Tomography**

4:30 PM	Cloud shape reconstruction and tomography: Two prototype algorithms	Anthony Davis	20
[4:50 PM	Multiscatter and refractive atmospheric tomography using multiangular images	Yoav Schechner	20
5:10 PM	Discussion	All	5
5:15 PM	Adjourn		

#### **Social event**

6:30 PM	Dinner at the Maxwell House historical landmark
	55 S. Grand Ave., Pasadena

# Friday, February 19

Aerosols Moderator: TBD

9:00 AM	MISR 4.4 km aerosol product	Michael Garay	20
9:20 AM	Estimating size-resolved surface particulate matter concentrations using MISR 4.4km size-fractionated aerosol optical depth with application to the study of children's respiratory health in Southern California	Meredith Franklin	20
9:40 AM	Recent improvements in air quality accelerate summertime warming in the southeast US	Michael Tosca	20
10:00 AM	Application of MISR and other aerosol products for air quality assessment in India	Sagnik Dey	20
10:20 AM	Discussion	All	10
10:30 AM	Break	All	20
10:50 AM	Regional aerosol type mapping with MISR	Ralph Kahn	20
11:10 AM	Identification and characterization of dust source regions across North Africa and the Middle East using MISR satellite observations	Olga Kalashnikova	20
11:30 AM	An intercomparison study on aerosol type information from different satellite instruments	Huikyo Lee	20
11:50 AM	Discussion	All	10
12:00 PM	Lunch	All	90

Surfaces Moderator: TBD

1:30 PM	Status and prospects of the MISR-HR processing system	Michel Verstraete	20
1:50 PM	Joining DSCOVR EPIC and MISR data	Yuri Knyazikhin	20
2:10 PM	Title TBD	Mark Chopping	20
2:30 PM	Discussion	All	10

# **Poster session II**

2:40 PM	Poster viewing and break	All	70

## **Polarization**

	Spectral invariance hypothesis study of polarized reflectance with Ground-based Multiangle SpectroPolarimetric Imager (GroundMSPI)	Christine Bradley	20
14.111 6/4	Applying a microfacet model to polarized light scattering measurements of the Earth's surface	Meredith Kupinski	20
4:30 PM	Coupled aerosol-ocean retrievals using AirMSPI	Feng Xu	20
14.20 500	Overview of AirMSPI data acquired during the 2015 CalWater-2 and RADEX/OLYMPEX campaigns	Felix Seidel	20
5:10 PM	Discussion	All	10

# Wrap-up

5:20 PM	Closing comments	David Diner	10
5:30 PM	Adjourn		

#### **Posters**

No.	Title	Lead author
	Polarization ray tracing calculation of polarized bidirectional reflectance	
1	distribution function (pBRDF) of microfaceted surfaces to investigate	Christine Bradley
	multiple reflection effects	
2		Mark Chopping
3	Progress in photoelastic modulator-based spectropolarimetric imaging of	David Diner
	aerosols and clouds	
4	Observing polarized light from exoplanets: Recent developments	Pushkar Kopparla
5	15 years of unique data from MISR	Catherine Moroney
6	Title TBD	Kevin Mueller
7	Superobbing satellite-derived winds in the U.S. Navy Global Data	Patricia Pauley
,	Assimilation System	raticia raticy
8	Atmospheric Motion Vectors: Comparisons and innovation statistics in	Rebecca Stone
	NAVGEM	Redecca Stone
9	Observed changes in cloud cover from MISR and MODIS over the Southern	Roger Marchand
	Oceans	Noger Marchana
10	Understanding scaling from field to MISR ToC/BoA BRFs using NASA CAR	lan-Peter Muller
10	and PARABOLA data	
11	Spectrally estimating leaf relative water content in the lab	Vern Vanderbilt
12	Estimating leaf relative water content from GroundMSPI imagery of a cotton	Vern Vanderbilt
12	canopy	verii vanderbiit
13	Is leaf volume reflectance Lambertian?	Vern Vanderbilt
14	On-board calibration of Airborne Multiangle Spectro-Polarimetric Imager	Gerard van Harten
14	(AirMSPI) polarization measurements	Gerard vari Franceii
15	Title TBD	Bin Yang
16	TOA albedo comparison between MISR and CERES over Polar region	Yizhe Zhan